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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

GWARTNEY, ELIZABETH A

ART UNIT	PAPER NUMBER
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1794

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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/588,375	Applicant(s) ROMEO, AURELIO	
	Examiner Elizabeth Gwartney	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-13 and 15-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-13 and 15-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Amendment filed November 20, 2009 has been entered. Claims 4 and 14 have been deleted and claims 28-40 have been added. Claims 1-3, 5-13 and 15-40 are pending.

Claim Objections

3. Applicant is advised that should claim 33 be found allowable, claim 34 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

4. Claim 1 is objected to because of the following informalities: Mathematical symbols such as "<" and ">" should be written as "less than or lower than" and "more than or greater than" to be consistent with the claim language of process claims 15-34 and 40. Appropriate correction is required.

5. Claims 2-3, 5-7 and 9-13 are objected to because of the following informalities: The term ***compositions*** in the preamble of claims 2-3, 5-7 and 9-13 should be in the non-plural form, i.e. ***composition***, to be consistent with independent claim 1. Appropriate correction is required.

6. Claim 37 is objected to because of the following informalities: The term ***food*** in the preamble of claim 37 should be in the plural form, i.e. ***foods*** to be consistent with claim 6. Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 1-3, 5-13 and 15-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regards to claim 1, the recitation "a tomato composition or product" renders the claim indefinite because it is not clear what the difference is between a tomato composition and a tomato product.

With regards to claim 5, the recitation "in admixture with lyophilized, or cryoconcentrated, or concentrated tomato juice serum" renders the claim indefinite because is not clear if the tomato composition according to claim further comprises a lyophilized, or cryoconcentrated, or concentrated tomato juice serum or if the described tomato serum is part of the original tomato composition or product.

With regards to claim 6, the recitation "foods and foodstuffs" renders the claim indefinite. First, it is not clear what the difference is between foods and foodstuffs . Second, given the plural form of the terms is used, it is not clear whether more than one food or foodstuff is required.

With regards to claim 6, the recitation "[c]ompositions of the tomato products of claim 1" renders the claim indefinite. Given claim 6 depends from claim 1, since claim 1 recites "a tomato composition or product", it is not clear whether a new composition is being claimed, i.e. composition of the tomato products of claim 1, or if applicant intends

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to claim a tomato composition according to claim 1 further comprising foods and foodstuffs.

With regards to claim 7, the recitation "wherein said foods and foodstuffs are selected from the following: first courses, soups, puree, sauces, juices, legumes, vegetables, yoghurts, cottage cheese and dairy products" renders the claim indefinite. It is not clear if the tomato composition according to claim 6 further comprise foods and food stuffs including first courses or if it is the foods and foodstuffs that comprise the tomato composition according to claim 1.

With regards to claim 8, the recitation "[s]auces containing the tomato products of claim 1" renders that claim indefinite given claim 1 is directed to tomato compositions and products.

Claim 11 recites the limitation "where in the amount of oil" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim. While claim 9 is directed to fats liquid at room temperature, the term "oil" is not used. Therefore, it is not clear if the oil recited in claim 11 is the same or different than fat liquid at room temperature recited in claim 9.

Claim 11 recites the limitation "based on the weight of the starting tomato product" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim. While claim 9 is directed to compositions and claim 1 is directed to tomato compositions and products, it is unclear if the "starting tomato product" is the tomato composition or product according to claim 1 or the ingredient used to make the tomato composition or product.

Claim 11 recites the limitation "the amount of . . . soft-grain cheese" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "the amount of hard-grain and grated cheese" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation "an amount of mayonnaise" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim. It is unclear whether the tomato composition or product according to claim 1 further comprises mayonnaise or if the water in oil or oil water emulsion is mayonnaise.

Claim 15 recites the limitation "from the starting tomato product" in line 3 and "recover of the mass on the filter" in line 7. There is insufficient antecedent basis for these limitations in the claim. It is unclear if the mass to be filtered is "the starting tomato product" and how the recovered mass is different than the "mass to be filtered."

With regards to the claim 15, the recitation "a product having a residual water content lower than 80% by weight, down to 1% by weight" renders the claim indefinite. Given the tomato composition or product according to claim recites the limitation "water <80% down to 15%", it is unclear how the product produced in claim 15 could have a water content down to 1%.

The term "slow" in claims 15, 31-34 and 40 is a relative term which renders the claims indefinite. The term "slow" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear what type of stirring is encompassed by "slow stirring."

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Claim 16 recites the limitation "the tomato juice, the tomato passatas, tomato cubes, chopped tomatoes, and/or peeled tomatoes are used" in lines 1-3. There is insufficient antecedent basis for this limitation in the claim. It is unclear if the recited tomato components are in reference to the starting tomato product of step a) wherein the starting tomato product is tomato juice, a tomato passatas, tomato cubes, chopped tomatoes and/or peeled tomatoes.

With regards to claim 16, the recitation "optionally the tomato juice being treated by a hot break or cold break process" renders the claim indefinite because the term "optionally" means that the limitation is not required and therefore it is not a required component of the claimed invention.

Claim 18 recites the limitation "the suspension" in line 4. There is insufficient antecedent basis for this limitation in the claim.

With regards to claim 20, the recitation "the oscillations/minute being from 1 to 20 oscillations/minute" renders the claim indefinite because it is not clear what motion the oscillations/minutes refers to or if it is wherein the oscillatory motion is from 1 to 20 oscillations/minute.

Claim 25 recites "the separator" in line 1. There is insufficient antecedent basis for this limitation in the claim.

With regards to claim 27, the recitation "when tomato juice suspension obtained from partially ripened fruits are used" renders the claim indefinite. First, it is not clear whether the "starting tomato product" of step a) in claim 15 is a tomato juice suspension obtained from partially ripened fruits or if the tomato juice suspension obtained from partially ripened fruits is used in a different step of claim 15.

Claims 28 recites “the foods” in line 1. There is insufficient antecedent basis for this limitation in the claim.

With regards to claim 28, the phrase “saucing foods” renders the claim indefinite because it is not clear what process is encompassed by the term “saucing”.

Claim 30 recites “the tomato juice” in line 1. There is insufficient antecedent basis for this limitation in the claim.

With regards to claim 31, the recitation “preparing the tomato products according to claim 1” renders the claim indefinite because claim 1 is directed to a tomato composition or product.

With regards to claim 31, the recitation “the starting tomato product” renders the claim indefinite because the claim is directed to a process for preparing tomato products. It is unclear what the difference is between the starting tomato product and the prepared tomato product.

Claims 31, 32, 33 and 34 recite “the mass” in step a). There is insufficient antecedent basis for this limitation in the claims. It is not clear if “the mass” to be filtered is the starting tomato product or another ingredient or material. Further, the recitation “recovery of the mass on the filter” renders the claims indefinite because it is not clear what the difference is between “the mass to be filtered” and the recovered “mass” of step b).

With regards to claims 31, 32, 33, 34 and 40 the recitations “optionally one or more additions of water and consequent repetition of step a)” and “optional addition of concentrate serum” renders the claims indefinite because the terms “optionally” and

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“optional” mean that the limitations are not required and therefore they are not a required component of the claimed invention.

With regards to claims 31, 32, 33, 34 and 40, the recitation “obtainment of a product having a residual water content lower than 80% by weight, down to 1% by weight” renders the claim indefinite because claim 1 is directed to a product having a residual water content lower than 80% by weight down to 15% by weight which is a more narrow limitation than that of claim 31.

With regards to claim 32, the recitation “separation of the tomato serum from the starting tomato composition or product” renders the claim indefinite because it is not clear what the difference is between the starting tomato composition or product and the prepared tomato composition or product.

With regards to claims 33, 34 and 40, the recitation “separation of the tomato serum from the starting tomato product” renders the claim indefinite because it is not clear what the difference is between the starting tomato composition or product and the prepared tomato product.

With regards to claim 37, the recitation “wherein the foods used are selected from vegetable oils” renders the claim indefinite because it is unclear if the foods are vegetable oils or if the foods are selected from vegetables oils and some other ingredients inadvertently removed from the claim. In this case, there is only one “foods” to choose from, i.e. vegetable oils.

With regards to claim 39, the recitation “wherein in step a), tomatoes and/or tomato juice, tomato passatas, tomato cubes chopped tomatoes and/or peeled tomatoes are used renders the claim indefinite. It is unclear if in step a) the starting tomato product

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is tomatoes and/or tomato juice, tomato passatas, tomato cubes, chopped tomatoes and/or peeled tomatoes or the recited ingredients are in addition to the starting tomato product.

Further, it is unclear if the choice includes tomatoes and/or tomato juice or tomatoes and/or tomato juice, tomato passatas, etc.

Claim Rejections - 35 USC § 112/Claim Rejections - 35 USC § 101

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. Claim 38 provides for the use of a condiment, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 38 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

12. Claims 1-3, 5-10 and 13 are rejected under 35 U.S.C. 102(a) as being anticipated by de la Cuadra (US 2003/0224100).

Regarding claims 1-3 and 5, de la Cuadra et al. disclose a tomato composition made by subjecting tomatoes to a hot break process, separating the resulting product into two streams: one comprising mainly soluble tomato solids or the "thin stream" and one comprising mainly insoluble solids or the "thick stream," concentrating the "thin stream" or serum to yield approximately 30° Brix, and adding the concentrated serum back to the "thick stream" or pulp to obtain a tomato composition with a ratio of soluble tomato solids to insoluble tomato solids of between 1.0:0.7, 1.0:0.8 or 1.0:1.5 ([0034]-[0036], [0045]/Examples 1-2 and 5). de la Cuadra et al. disclose a tomato composition, having about 11% to 17.5% water (i.e. wherein the concentrated serum is 30° Brix and the pulp comprises 7% water) and about 82.5% to 89% dry residue wherein the dry residue has a ratio of soluble tomato solids to insoluble tomato solids of between 1.0:0.7, 1.0:0.8 or 1.0:1.5 ([0034]-[0036], [0045]/Examples 1-2 and 5).

Regarding claims 6-10, 35 and 37, de la Cuadra et al. disclose all of the claim limitations as set forth above. de la Cuadra et al. also disclose tomato products, i.e. tomato-based spread, ketchup, sweet tomato sauce and tomato mousse, comprising the tomato composition of claim 1 and 2-50% of one or more components selected from the group consisting of vegetable oil, aroma or flavoring compounds, onion, shallot, garlic, bell peppers, sweet bell peppers, chili peppers, courgette, egg plant, beet root, carrot, spinach, broccoli, tomato dices or chunks, fruit juices, fruit pastes, fruit particles, honey,

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herbs, spices, sugar, nuts, seeds, cheese, cream (), butter (water in oil emulsion), egg white, egg yolk, starch and gums ([0029], [0045]/Example 1-2 and 5/Table 1).

Regarding claim 13, de la Cuadra et al. disclose all of the claim limitations as set forth above. Given that de la Cuadra et al. disclose an oil-in-water type composition, i.e. tomato mousse, since the tomato solids comprise about 23% of the composition, it is clear that the amount of oil-in-water emulsion must comprise the balance of the composition, i.e. about 77%.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. Claims 11-12 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over de la Cuadra et al. (US 2003/0224100).

Regarding claims 11-12, de la Cuadra disclose all of the claim limitations as set forth above. Given de la Cuadra et al. disclose cheese broadly ([0029]), since soft-grain

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and grated hard-grain cheeses are well known ingredients used in food preparation, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used any cheese, including soft-grain and grated hard-grain cheese, with the tomato composition of de la Cuadra et al., and arrive at the present invention.

Regarding claims 28-29, de la Cuadra et al. disclose all of the claim limitations as set forth above. Given de la Cuadra et al. disclose sauces and condiments including ketchup and sweet tomato sauce ([0045]/Examples 2-3), since sauces and condiments are known to be mixed with foods, it would have been obvious to one of ordinary skill in the art at the time of the invention to have mixed the tomato composition of modified de la Cuadra et al. with a food (e.g. pasta, meat for meatloaf) to produce a desired food dish or flavor.

16. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over de la Cuadra et al. (US 2003/0224100) in view of Gourmet ("Lowcountry Aioli").

Regarding claim 36, de la Cuadra et al. disclose all of the claim limitations as set forth above. While de la Cuadra et al. disclose various tomato products made by adding an ingredient or mixture of ingredients to a tomato composition ([0027], [0045]/Table 1/Examples 1-2 and 5), the reference does not explicitly disclose adding mayonnaise to a tomato composition.

Gourmet teaches that it was known to combine mayonnaise with a tomato composition to produce an aioli product. Given that mayonnaise was known to be used in combination with a tomato composition, it would have been obvious to one of ordinary

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skill in the art to have combined the tomato composition of de la Cuadra et al. with mayonnaise to make an aioli product.

17. Claims 15-27, 30-34, and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over de la Cuadra et al. (US 2003/0224100) in view of Succar et al. (WO 03/024243).

Regarding claims 15-16, 18, 20-21, 23, 30-34, 39 and 40, de la Cuadra et al. disclose all of the claim limitations as set forth above. Further, de la Cuadra et al. disclose a process for making tomato-based products comprising the following steps: (a) subjecting tomatoes to a hot break process; (b) separating the resulting product into two streams by mechanical separation (i.e. solid-liquid separation apparatus): one comprising mainly soluble tomato solids, i.e. serum, and one comprising mainly insoluble solids, i.e. pulp, by mechanical separation; (c) concentrating the separated serum to 30° Brix; and (d) recombining the recovered pulp and concentrated serum streams to obtain tomato-based product with a ratio of soluble tomato solids to insoluble tomato solids of between 1.0:0.5 and 1.0:2.0 and a water content of lower than 80% and greater than 1% (see [0045]/Examples 1-5, [0034]-[0036]).

While de la Cuadra et al. disclose concentrating the serum stream, the reference does not disclose concentrating the recovered pulp or pulp stream. Further, while de la Cuadra et al. disclose that the thin and thick streams are separated by mechanical separation ([0035]), the reference does not explicitly disclose that the starting tomato base is maintained under a slow stirring.

Succar et al. teach a process for making tomato paste comprising processing tomatoes into tomato juice, subjecting the juice to a decanter that separates the juice into two portions (i.e. serum and pulp), concentrating the serum and pulp portions, and recombining the serum and cake portions to produce a tomato paste having improved color, texture, flavor, and nutrition (Abstract). Succar et al. also teach that the tomato material, i.e. juice, is provided to the decanter, the decanter and internal cake scraping auger are rotated (i.e. stirring the tomato juice), and the cake portion is separated from the serum portion (p.9/L11-17, Figure 4). Succar et al. teach that the scraping auger (i.e. centrally placed stirrer, shape of a helix) has a scroll speed differential of 20-40 rpm (p.9/L30-35). Succar et al. also teach that the decanter comprises a cylindrical vessel with openings (*see* Figure 4/Appeture-431).

de la Cuadra et al. and Succar et al. are combinable because they are concerned with the same field of endeavor, namely, processes to make tomato-based products comprising: hot or cold breaking tomatoes, separating the resulting product into two streams: one of serum and one of pulp, concentrating the serum stream, and recombining the two streams. Given that Succar et al. disclose separating tomatoes into serum and pulp portions by mechanical separation, since Succar et al. disclose that it was known to use a decanter to separate the serum and pulp fractions of tomatoes, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used a decanter that rotates (i.e. stirs) the tomato material during separation, as taught by Succar et al., in the process of de la Cuadra et al. because doing so would amount to nothing more than the use of a known mechanical separating device for its intended use in a known environment to accomplish entirely expected results.

Given de la Cuadra et al. disclose that the thick and thin stream are recombined in specific ratios to produce products with different consistencies ([0027]), since Succar et al. teach combining concentrated pulp (i.e. thick stream) with concentrated serum (i.e. concentrated thin stream) to make a thick tomato paste product, it would have been obvious to one of ordinary skill in the art at the time of the invention to have concentrated the thick stream of de la Cuadra et al. to recombine with concentrated thin stream for the purpose of making a thick tomato paste product.

Regarding claim 17, modified de la Cuadra et al. disclose all of the claim limitations as set forth above. Given that de la Cuadra et al. do not explicitly disclose a temperature in which the separation process is carried out, it can be assumed that the process is carried out at ambient temperature, i.e. room temperature (i.e. about 20°C).

Regarding claim 19, modified de la Cuadra et al. disclose all of the claim limitations as set forth above. While Succar et al. teach a decanter that rotates, the reference does not explicitly disclose that it rotates at a speed from 1 rpm to 20 rpm. Succar et al. teach that separation can be adjusted by varying the rotation speed of the decanter (p.9/L30-32). As separation efficiency is a variable that can be modified, among others, by adjusting the rotation speed of the decanter, the precise rotation speed would have been considered a result effective variable by one of ordinary skill in the art at the time of the invention. As such, without showing unexpected results, the claimed rotation speed cannot be considered critical. Accordingly, one of ordinary skill in the art at the time the invention was made would have optimized, by routine experimentation, the rotation speed of the separation decanter of modified de la Cuadra et al. to obtain the desired separation (*In re Boesch*, 617 F.2d. 272, 205 USPQ 215 (CCPA 1980)), since it

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has been held that where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. (*In re Aller*, 105 USPQ 223).

Regarding claims 22 and 27, modified de al Cuadra et al. disclose all of the claim limitations as set forth above. While Succar et al. teach a decanter having walls with openings (see Figure 4/Aperture-431), the reference does not disclose that the width of the openings is not greater than 0.1 mm or higher than 0.1 but not higher than 0.5 mm. As serum purity is a variable that can be modified, among others, by adjusting the aperture in the decanter, the precise opening width would have been considered a result effective variably by one of ordinary skill in the art at the time of the invention. As such, without showing unexpected results, the claimed opening width cannot be considered critical. Accordingly, one of ordinary skill in the art at the time the invention was made would have optimized, by routine experimentation, the aperture opening width in the decanter of modified de la Cuadra et al. to obtain the desired serum purity (*In re Boesch*, 617 F.2d. 272, 205 USPQ 215 (CCPA 1980)), since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. (*In re Aller*, 105 USPQ 223).

While de al Cuadra et al. disclose the use of tomatoes, the reference does not explicitly disclose the maturity of the fruit. However, given de al Cuadra et al. disclose tomatoes, it is clear that the tomatoes would be ripened to some extent, i.e. partially.

Regarding claim 24, modified de la Cuadra et al disclose all of the claim limitations as set forth above. While Succar et al. teach a decanter in the shape of a cylinder positioned horizontally (see Figure 4), the reference does not explicitly teach the

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size of the cylinder (i.e. diameter and length). Since the instant specification is silent to unexpected results, it would have been obvious to one of ordinary skill in the art to change dimensions of the decanter, since such a modification would have involved a mere change in the size (or dimension) of a component. A change in size (dimension) is generally recognized as being within the level of ordinary skill in the art. In *re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955). Where the only difference between the prior art and the claims is a recitation of relative dimensions of the claimed device, and the device having the claimed dimensions would not perform differently than the prior art device, the claimed device is not patentably distinct from the prior art device, *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984).

Regarding claim 25, modified de la Cuadra et al. disclose all of the claim limitations as set forth above. Given that Succar et al. teach a decanter to process tomatoes, it is clear that the decanter would intrinsically be of metal material.

Regarding claim 26, modified de la Cuadra et al. disclose all of the claim limitations as set forth above. Further, Succar et al. teach sterilizing the fractionated serum and pulp fractions (p.7/L24-26). The ordinarily-skilled artisan would understand that sterilization helps extend product shelf life by inhibiting the growth of unwanted bacteria, yeasts and molds.

de la Cuadra et al. and Succar et al. are combinable because they are concerned with the same field of endeavor, namely, processes to make tomato-based products comprising: hot or cold breaking tomatoes, separating the resulting product into two streams: one of serum and one of pulp, concentrating the serum stream, and recombining

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the two streams. It would have been obvious to one of ordinary skill in the art to have sterilized the fractionated serum and pulp fractions in the process of modified de la Cuadra et al. for the purpose of extending the shelf-life of the resulting product.

Response to Arguments

18. ***Claim rejections under 35 USC §112, 2nd paragraph-***

Applicant's arguments filed November 20, 2009 have been fully considered but they are not persuasive.

With regards to claim 15 and the limitation "mass to be filtered," applicants find that claim 16 provides antecedent base for the limitation. Applicants explain that "the mass to be filtered" refers to any of the starting tomato products indicated in claim 15.

Here, given claim 16 depends from claim 15, claim 16 can not provide antecedent basis for a term used in claim 15. It is not clear that the "mass to be filtered" is tomato juice, tomato passatas, tomato cubes, chopped tomatoes and/or peeled tomatoes.

With regards to the rejection of claim 16, applicants find that rejection has been overcome by the amendment to claim 15. In this case, no antecedent basis has been provided for the recitation “ *the* tomato juice, the tomato passatas, tomato cubes, chopped tomatoes and/or peeled tomatoes” in claim 15.

With regards to the rejection of claim 18, applicants explain that the term “suspension” refers not only to tomato juice but to any of the tomato materials used in step a) and that one skilled in the art understands that the term "suspension" is equivalent to , or interchangeable with, "the mass to be filtered." Here, Examiner does not find that

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the terms are interchangeable or that is clear that "the suspension" refers to any of the tomato material used in step a).

19. *Claim rejections under 35 USC §102(a) in view of de la Cuadra (US 2003/0224100)-*

Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Applicants explain that de la Cuadra et al. disclose a thick stream having a total solids content of 93% and 7% water and a thin stream with 30% (i.e. 30 Brix) soluble solids. Applicants find that de la Cuadra et al. does not disclose the total solids content of the thin stream. Therefore, applicants argue, that the total solids content of the combined thick and thin stream is not known.

de la Cuadra discloses that in the split stream process, substantially all of the soluble tomato solids end up in the thin stream and substantially all of the insoluble tomato solids end up in the thick stream ([0031]). Therefore, it is clear that the concentrated thin stream would comprise 30% total solids and the thick stream would comprise 93% total solids. Further, de la Cuadra discloses tomato compositions made by combining different ratios of the thick and thin streams ([0045]/Table 1/Examples 1-2 and 5) that results in products comprising from 11% to 17.5% water and 82.5% to 89% dry residue or total solids.

20. *Claim rejections under 35 USC §103(a) in view of de la Cuadra (US 2003/0224100) and Succar et al. (WO 03/024243)*

Note, while applicants summarize the features of de la Cuadra et al. and Succar et al., applicants do not explicitly state why the prior art references do not meet the claim limitations of the present invention.

In summary, applicants submit that there is no mention in the prior art combination on how to solve the technical problem of the present invention, i.e. to obtain tomato products showing the property combination of improved saucing combined with improved preservation power. Applicants find that the technical problem of de la Cuadra resides in preparing tomato-based products having thick consistency and the process for their preparation.

While de la Cuadra et al. does not recognize improved saucing and improved preservation power, given de la Cuadra et al. disclose a tomato composition identical to that presently claimed, it is clear that the tomato composition would inherently display the recited saucing and preservation properties.

In this case, Succar et al. is not used to teach a separation apparatus. Given de la Cuadra et al. disclose mechanical separation of tomato into a thick and thin streams, since Succar et al. teach that it was known to use a decanter to separate tomato serum (i.e. thin stream) from tomato pulp (i.e. thick stream), it would have been obvious to one of ordinary skill in the art at the time of the invention to have used a decanter to separate the tomato streams of de la Cuadra et al. because doing so would amount to nothing more than the use of a known mechanical separating device for its intended use in a known environment to accomplish entirely expected results.

Applicants find that given Succar discloses a separation device, a decanter, the reference does not disclose a separation solid liquid apparatus based on filtration instead

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of on centrifugation as in steps a) and b) of the process of the present invention. Further, applicants find that in the present invention there is no solid adhering or accumulating on the walls.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., separation solid liquid apparatus ***based on filtration***) is not recited in rejected claims 15, 31-34 and 40. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicants argue that Succar et al. discloses that an exemplary decanter operates at approximately 3400 rpm with a scroll speed differential of 20-40 rpm and this mean that the rotating speed of the auger is from 20-40 rpm more or less than that of the decanter. Therefore, applicants argue that "one skilled in view of the operating condition of the decanter disclosed by Succar is not motivated to use a low stirring in a separation process of tomato products."

Given the present invention requires "slow stirring", since no guidance as to what speeds are encompassed by the term "slow," the teaching of Succar et al. reads on the limitation "slow stirring."

Applicants note that Succar teaches that the separation into the cake portion fraction and the serum portion fraction is improved with increasing temperature and a range of 82°C-88°C.

It is unclear where Succar et al. teaches the influence of temperature on the separation process. Clarification is requested.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Gwartney whose telephone number is (571) 270-3874. The examiner can normally be reached on Monday - Friday; 7:30AM - 3:30PM EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. G./

Examiner, Art Unit 1794

/Keith D. Hendricks/

Supervisory Patent Examiner, Art Unit 1794